

Overview

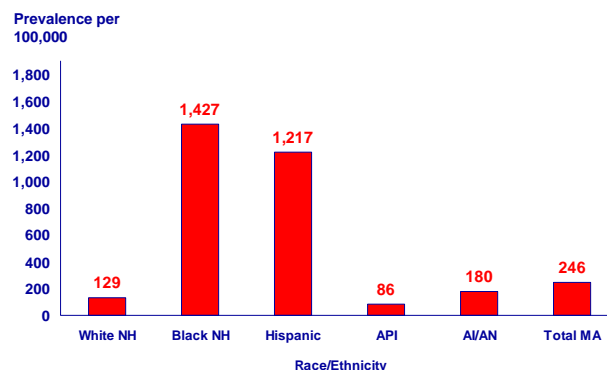
HIV/AIDS does not affect all Massachusetts populations equally. One way to reveal which racial/ethnic groups are experiencing differential impact is to compare HIV/AIDS prevalence (people living with HIV/AIDS) and diagnoses of HIV infection per 100,000 population. These rates are age-adjusted to make comparison across groups more valid.¹

In Massachusetts, the age-adjusted prevalence rate of HIV/AIDS varies substantially by race/ethnicity. The age-adjusted prevalence rate among black (non-Hispanic) individuals (1,427 per 100,000) is 11 times greater, and among Hispanic individuals (1,217 per 100,000) is 9 times greater than for white (non-Hispanic) individuals (129 per 100,000). Similarly, black (non-Hispanic) and Hispanic individuals have been diagnosed with HIV infection in recent years at higher rates than white (non-Hispanic) individuals. The age-adjusted average annual rate of HIV diagnosis from 2003 to 2005 among black (non-Hispanic) individuals (89 per 100,000) is 15 times greater, and among Hispanic individuals (63 per 100,000) is 11 times greater than for white (non-Hispanic) individuals (6 per 100,000).

The following analyses describe age-adjusted rates of HIV/AIDS prevalence and recent diagnosis of HIV infection per 100,000 in Massachusetts.

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity

Figure 1. Age-Adjusted HIV/AIDS Prevalence Rate per 100,000¹ Population by Race/Ethnicity: Massachusetts, 2005

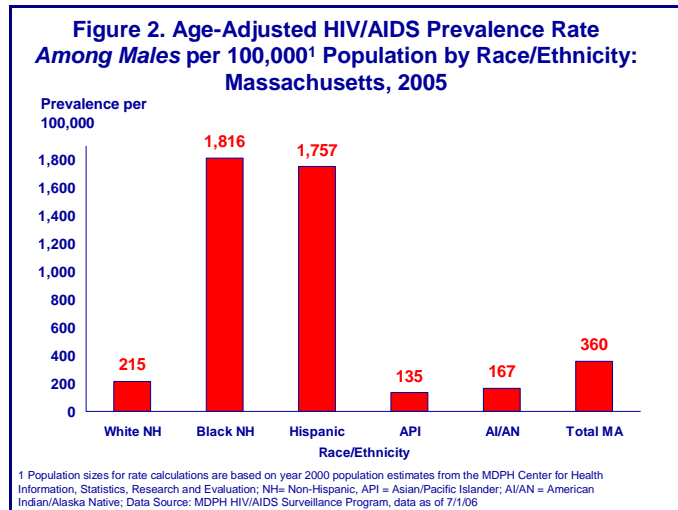


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic; API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, data as of 7/1/06

- On December 31, 2005, out of every 100,000 people in Massachusetts, 246 were living with HIV/AIDS (rate adjusted for age of the population groups).
- The age-adjusted prevalence rate of HIV/AIDS among black (non-Hispanic) individuals (1,427 per 100,000) is 11 times greater, and among Hispanic individuals (1,217 per 100,000) is 9 times greater than for white (non-Hispanic) individuals (129 per 100,000).
- When considering the differential impact of HIV/AIDS by race/ethnicity, it is important to note that, within the broad category of race/ethnicity, there are differences by place of birth. For example, 39% of black (non-Hispanic) individuals living with HIV/AIDS are non US-born as compared to 5% of white (non-Hispanic) individuals. Non US-born black (non-Hispanic) individuals living with HIV/AIDS are primarily from Sub-Saharan Africa and the Caribbean Basin, whereas non US-born white (non-Hispanic) individuals are primarily from North America and Europe.

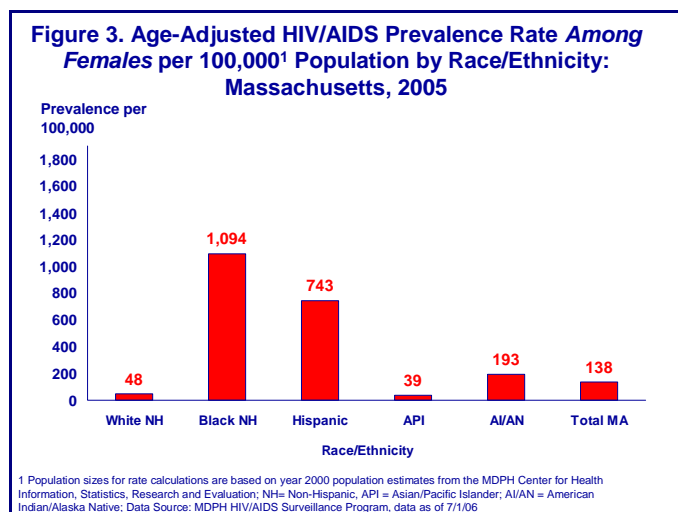
¹ See the detailed data tables and technical notes in the Appendix for a full description of age-adjustment and sample calculations.

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity for Males



- On December 31, 2005, out of every 100,000 **males** in Massachusetts, 360 were living with HIV/AIDS (rate adjusted for age of population groups).
- The age-adjusted prevalence rate of HIV/AIDS among both black (non-Hispanic) **males** (1,816 per 100,000) and Hispanic **males** (1,757 per 100,000) is 8 times greater than for white (non-Hispanic) **males** (215 per 100,000).

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity for Females



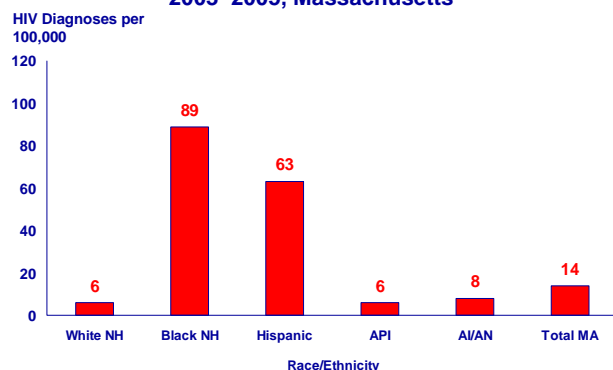
- On December 31, 2005, out of every 100,000 **females** in Massachusetts, 138 were living with HIV/AIDS (rate adjusted for age of population groups).
- The age-adjusted prevalence rate of HIV/AIDS among black (non-Hispanic) **females** (1,094 per 100,000) is 23 times greater, and among Hispanic **females** (743 per 100,000) is 15 times greater than for white (non-Hispanic) **females** (48 per 100,000).

Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity and Health Service Region (HSR) in Massachusetts

- The Boston HSR has the highest age-adjusted prevalence rate of HIV/AIDS among regions at 766 per 100,000.
- In each region, the age-adjusted prevalence rate of HIV/AIDS among black (non-Hispanic) individuals and Hispanic individuals is higher than among white (non-Hispanic) individuals.
- Among regions, the highest age-adjusted prevalence rate of HIV/AIDS for black (non-Hispanic) individuals is in the Central region at 1,611 per 100,000.
- Among regions, the highest age-adjusted prevalence rate of HIV/AIDS for Hispanic individuals is in the Western region at 1,662 per 100,000. This rate is 22 times the rate for white (non-Hispanic) individuals in the Western region (75 per 100,000).
- Unlike the other health service regions where the age-adjusted prevalence rate of HIV/AIDS among white (non-Hispanic) individuals is higher than among Asian/Pacific Islanders, in the Northeast region the age-adjusted prevalence rate of HIV/AIDS is 133 per 100,000 for Asian/Pacific Islanders and 95 per 100,000 for white (non-Hispanic) individuals.

Average Annual Rate of HIV Diagnosis by Race/Ethnicity, 2003–2005

Figure 4. Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population by Race/Ethnicity: Average Annual Rate 2003–2005, Massachusetts

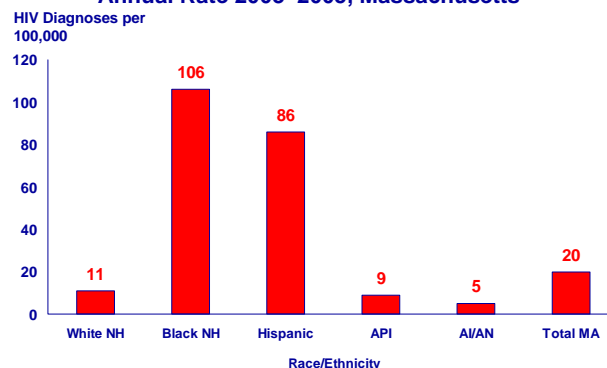


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, data as of 7/1/06

- Out of every 100,000 people in Massachusetts, an average of 14 people were diagnosed with HIV infection each year within the three-year period 2003 to 2005 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis within the three-year period 2003 to 2005 among black (non-Hispanic) individuals (89 per 100,000) is 15 times greater, and among Hispanic individuals (63 per 100,000) is 11 times greater than for white (non-Hispanic) individuals (6 per 100,000).
- As with HIV/AIDS prevalence, there are differences by place of birth. For example, 50% of black (non-Hispanic) individuals diagnosed with HIV infection within the three-year period 2003 to 2005 are non US-born as compared to 7% of white (non-Hispanic) individuals. Non US-born black (non-Hispanic) individuals diagnosed with HIV infection from 2003 to 2005 are primarily from Sub-Saharan Africa and the Caribbean Basin whereas non US-born white (non-Hispanic) individuals are primarily from Central and South America.

Average Annual Rate of HIV Diagnosis by Race/Ethnicity for *Males*, 2003–2005

Figure 5. Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population Among *Males* by Race/Ethnicity: Average Annual Rate 2003–2005, Massachusetts



¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, data as of 7/1/06

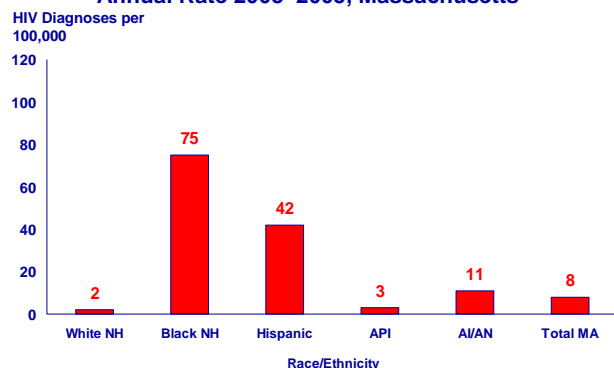
- Out of every 100,000 **males** in Massachusetts, there was an average of 20 diagnosed with HIV infection each year within the three-year period 2003 to 2005 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis within the three-year period 2003 to 2005 among black (non-Hispanic) **males** (106 per 100,000) is 10 times greater, and among Hispanic **males** (86 per 100,000) is 8 times greater than for white (non-Hispanic) **males** (11 per 100,000).

For detailed data tables and technical notes see Appendix

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617.624.5300 FAX 617.624.5399 <http://www.mass.gov/dph/aids/hiv aids.htm>

Average Annual Rate of HIV Diagnosis by Race/Ethnicity for *Females*, 2003–2005

Figure 6. Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population Among Females by Race/Ethnicity: Average Annual Rate 2003–2005, Massachusetts



¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic; API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, data as of 7/1/06

- For every 100,000 **females** living in Massachusetts, there was an average of 8 diagnosed with HIV infection each year within the three-year period 2003 to 2005 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis within the three-year period 2003 to 2005 among black (non-Hispanic) **females** (75 per 100,000) is 38 times greater, and among Hispanic **females** (42 per 100,000) is 21 times greater than for white (non-Hispanic) **females** (2 per 100,000).

Average Annual Rate of HIV Diagnosis by Race/Ethnicity and Health Service Region (HSR), 2003–2005

- Among regions, the Boston HSR has the highest age-adjusted average annual rate of diagnosis of HIV infection within the three-year period 2003 to 2005 at 40 per 100,000.
- In each region, the age-adjusted average annual rate of HIV diagnosis among black (non-Hispanic) and Hispanic individuals is higher than among white (non-Hispanic) individuals.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for black (non-Hispanic) individuals is in the Central HSR at 135 per 100,000.

- The Western HSR has the highest age-adjusted average annual rate of HIV diagnosis for Asian/Pacific Islanders at 15 per 100,000.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for Hispanic individuals is in the Western HSR at 99 per 100,000.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for white (non-Hispanic) individuals is in the Boston HSR at 25 per 100,000.

Data Source:

HIV/AIDS Case Data: Massachusetts Department of Public Health, HIV/AIDS Surveillance System, All Data as of 7/1/06